



**Rules and
Regulations for
the Classification
of Naval Ships,
January 2009**

Notice No. 1

Effective Date of Latest
Amendments:

See page 1

Issue date: April 2009

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RULES AND REGULATIONS FOR THE CLASSIFICATION OF NAVAL SHIPS, *January 2009*

Notice No. 1

This Notice contains amendments within the following Sections of the *Rules and Regulations for the Classification of Naval Ships, January 2009*. The amendments are effective on the dates shown:

Volume	Part	Chapter	Section	Effective date
1	1	1	1, 2, 3, 4, 5, 7, 8, 9	1 April 2009
1	6	6	2	Corrigendum
2	1	3	5	Corrigendum
2	10	1	1, 10, 17	Corrigenda

It will be noted that the amendments also include corrigenda, which are effective from the date of this Notice.

The *Rules and Regulations for the Classification of Naval Ships, January 2009* are to be read in conjunction with this Notice No. 1. The status of the Rules is now:

Rules for Naval Ships
Notice No. 1

Effective date: January 2009
Effective date: 1 April 2009 & Corrigenda

Volume 1, Part 1, Chapter 1

General Regulations

Effective date 1 April 2009

■ Section 1

1.1 Lloyd's Register (hereinafter referred to as 'LR'), which is recognised under the laws of the United Kingdom as a corporate body and a charity established for the benefit of the community, was founded in 1760. It was established for the purpose of producing a faithful and accurate Classification of Merchant Shipping classification of merchant shipping. It now primarily produces Classification classification Rules.

■ Section 2

2.1 LR remains the sole classification society in the LR Group. LR is managed by a Board of Trustees (hereinafter referred to as 'the Board').

The Board has:

~~Appointed~~ appointed a Classification Committee and determined its powers and functions and authorised it to delegate certain of its powers to a Classification Executive and Devolved Classification Executives;

~~Appointed~~ appointed Technical Committees and determined their powers, functions and duties.

■ Section 3

3.1 LR's Technical Committee is at present composed of a maximum of 80 members which includes:

Ex officio members:

	TOTAL
• The Chairman and Chief Executive Officer of LR	1
• The Chairman of the Classification Committee of LR	1

Members Nominated by:

▲ The Board	18
• Technical Committee	
• The Royal Institution of Naval Architects	2
• The Institution of Engineers and Shipbuilders in Scotland	2
• The Institute of Marine, Engineering, Science and Technology	2
• Institute of Materials, Minerals and Mining	1
• Honourable Company of Master Mariners	2
• Institution of Engineering and Technology	1
• Institute of Refrigeration	1
• Welding Institute	1
▲ The Institution of Mechanical Engineers	2
• The Shipbuilders' and Shiprepairers' Association	2
▲ The Short Sea Group of the Chamber of Shipping	1
• The Society of Consulting Marine Engineers and Ship Surveyors	1
• Community of European Shipyards Associations	1
• Society of Maritime Industries	2
• European Marine Equipment Council	1
• Chamber of Shipping	1
▲ The Institute of Materials	1
▲ The UK Steel Association	1
▲ The Honourable Company of Master Mariners	2
▲ The Institution of Electrical Engineers	1
▲ Federation of British Electrotechnical and Allied Manufacturers' Associations	1
▲ The Technical Committee	18
▲ The Technical Committee (from other countries)	18
▲ The Institute of Refrigeration	1
▲ International Oil Companies	2
▲ Association of European Shipbuilders and Shiprepairers	1
• Greek Shipping Co-operation Committee	1
• International Association of Oil and Gas Producers	1

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3.2 In addition to the foregoing:

- (a) Each National or Area Committee may appoint a representative to attend meetings of the Technical Committee.
- (b) A maximum of five representatives from National Administrations may, ~~with the consent of the Technical Committee~~, be co-opted to serve on the Technical Committee. ~~Such representatives~~ Representatives from National Administrations may also be elected as members of the Technical Committee under one of the categories identified in 3.1.
- (c) Further persons may, ~~with the consent of the Technical Committee~~, be co-opted to serve on the Technical Committee by the Technical Committee.

~~3.4 The function of the Technical Committee is to consider any technical problems connected with LR's business and with the exception of changes necessitated by mandatory implementation of International Conventions, Codes or Unified Requirements adopted by the International Association of Classification Societies, any proposed alterations in the existing Rules and to frame new Rules for classification as deemed necessary.~~

3.4 The function of the Technical Committee is to consider:

- (a) any technical issues connected with LR's marine business;
- (b) any proposed alterations in the existing Rules;
- (c) any new Rules for classification;

Where changes to the Rules are necessitated by mandatory implementation of International Conventions, Codes or Unified Requirements adopted by the International Association of Classification Societies these may be implemented by LR without consideration by the Technical Committee.

3.5 The term of office of the Chairman and of all members of the Technical Committee is five years. Members may be re-elected to serve ~~one~~ an additional term of office with the approval of the Board. The term of office of the Chairman may be extended with the approval of the Board.

3.6 In the case of continuous non-attendance of a member, the Technical Committee may withdraw ~~his/her~~ membership.

3.7 Meetings of the Technical Committee are convened as often and at such times and places as is necessary, but there is to be at least one meeting in each year. Urgent matters may be considered by the Technical Committee by correspondence.

3.8 Any proposal ~~of the Technical Committee~~ involving any alteration in, or addition to, Part 1, Chapter 1 of Rules for Classification is subject to approval of the Board. All other proposals for additions to or alterations to the Rules for Classification other than Part 1, Chapter 1, will, following consideration and approval by the Technical Committee, either at a meeting of the Technical Committee or by correspondence, be submitted recommended to the Board for adoption.

■ Section 4

4.1 LR's Naval Ship Technical Committee (~~hereinafter referred to as 'the NSTC'~~) is at present composed of ~~up to~~ a maximum of 50 members and includes ~~nominees of:~~

Ex officio members

- Chairman and Chief Executive Officer of LR

Member nominated by:

- Naval Ship Technical Committee;
- The Royal Navy and the UK Ministry of Defence;
- ▲ ~~The Defence Evaluation and Research Agency;~~
- UK Shipbuilders, Ship Repairers and Defence Industry;
- Overseas Navies, Governments and Governmental Agencies;
- Overseas Shipbuilders, Ship Repairers and Defence Industries;
- ▲ ~~Various maritime bodies and institutions, nominated by the NSTC;~~
- ▲ ~~The Chairman of LR and Chairman of the Classification Committee who are ex officio members.~~

4.3 All members of the ~~NSTC~~ Naval Ship Technical Committee are to hold security clearance from their National Authority for the equivalent of NATO CONFIDENTIAL. All material is to be handled in accordance with NATO Regulations or, for non-NATO countries, an approved equivalent. No classified material shall be disclosed to any third party without the consent of the originator.

4.4 The term of office of the ~~NSTC~~ Naval Ship Technical Committee Chairman and of all members of the ~~NSTC~~ Naval Ship Technical Committee is five years. Members may be re-elected to serve ~~one~~ an additional term of office with the approval of the Board. The term of the Chairman may be extended with the approval of the Board.

4.5 In the case of continuous non-attendance of a member, the ~~NSTC~~ Naval Ship Technical Committee may withdraw ~~that person's~~ membership.

Volume 1, Part 1, Chapter 1

4.6 The function of the ~~NSTC~~ Naval Ship Technical Committee is to consider technical issues connected with Naval Ship matters and to approve proposals for new Naval Ship Rules, or amendments to existing Naval Ship Rules.

4.7 Meetings of the ~~NSTC~~ Naval Ship Technical Committee are convened as necessary but there will be at least one meeting per year. Urgent matters may be considered by the Naval Ship Technical Committee by correspondence.

~~4.8 Following approval by the NSTC, details of new Rules (or amendments) will be submitted to the Board for adoption.~~

4.8 Any proposal involving any alteration in, or addition to, Part 1, Chapter 1 of Rules for Classification of Naval Ships is subject to approval of the Board. All other proposals for additions to or alterations to the Rules for Classification of Naval Ships, other than Part 1, Chapter 1, will following consideration and approval by the Naval Ship Technical Committee, either at a meeting of the Naval Ship Technical Committee or by correspondence, be recommended to the Board for adoption.

4.9 The Naval Ship Technical Committee is empowered to:

- (a) appoint sub-Committees or panels; and
- (b) co-opt to the Naval Ship Technical Committee, or to its sub-Committees or panels, representatives of any organization or industry or private individuals for the purpose of considering any particular problem.

■ Section 5

(Part only shown)

5.1 LR has the power to adopt, and publish as deemed necessary, Rules relating to ~~Classification~~ classification and has (in relation thereto) provided the following:

- (c) All reports of survey are to be made by ~~Surveyors~~ surveyors authorised by members of the LR Group to survey and report (hereinafter referred to as 'the Surveyors') according to the form prescribed, and submitted for the consideration of the Classification Committee.

■ Section 7

7.1 LR has ~~the~~ power to withhold or, if already granted, to suspend or withdraw any ~~ship from~~ class (or to withhold any certificate or report in any other case), in the event of non-payment of any fee to any member of the LR Group.

■ Section 8

8.1 When providing services LR does not assess compliance with any standard other than the applicable LR Rules, international conventions, and other standards agreed in writing.

Volume 1, Part 6, Chapter 6

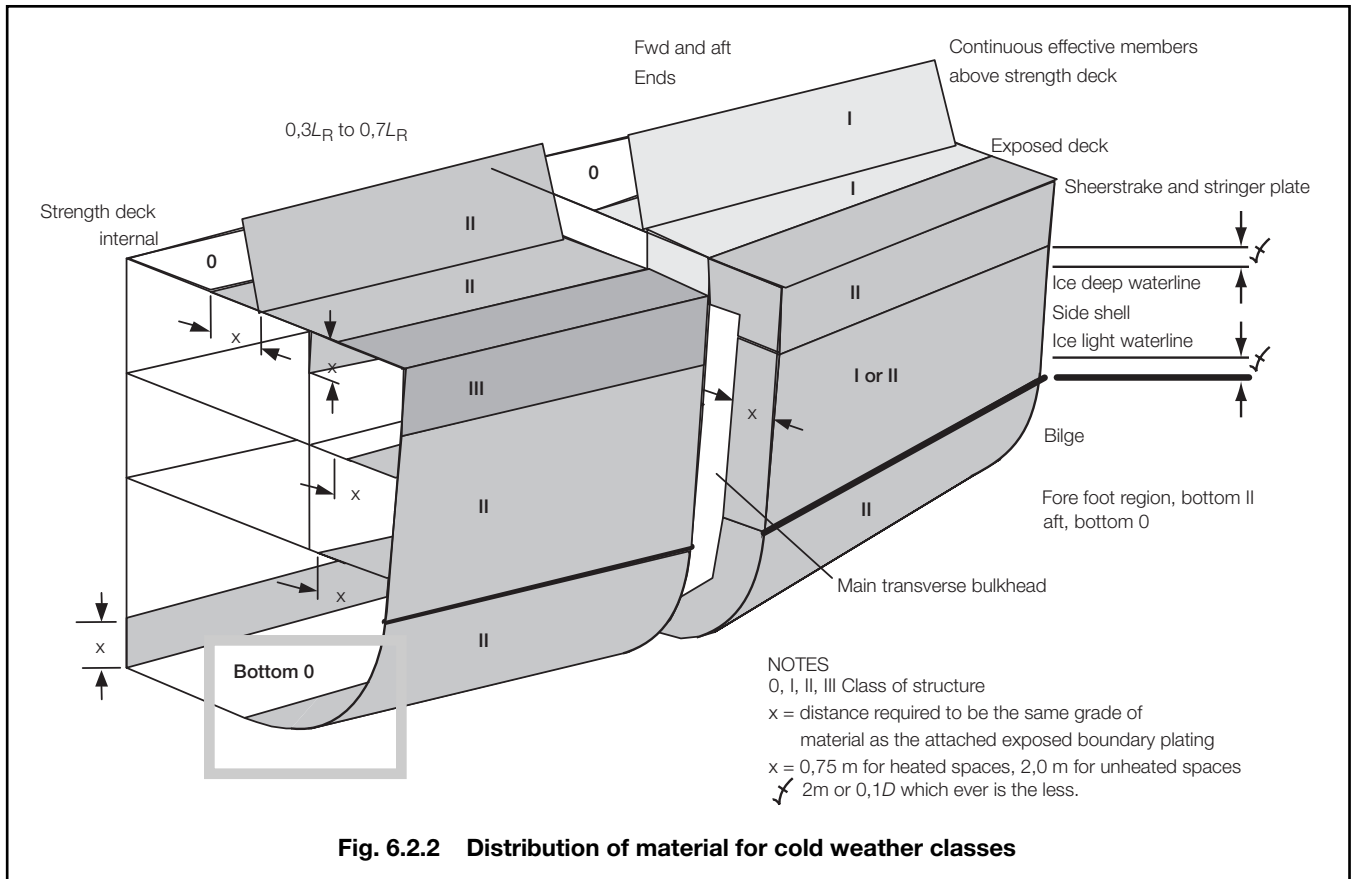
Material and Welding Requirements

CORRIGENDUM

■ Section 2

Materials

2.4 Ships operating in cold weather conditions



Volume 2, Part 1, Chapter 3

Requirements for Fusion Welding of Pressure Vessels and Piping

CORRIGENDUM

■ Section 5

Welded pressure pipes

5.2 Welding workmanship

5.2.2 All welding is to be performed in accordance with the approved welding procedures (~~see 6.3.4~~) by welders who are qualified for the materials, joint types and welding processes employed.

Volume 2, Part 10, Chapter 1

Electrical Engineering

CORRIGENDA

■ Section 1 General requirements

1.7 Quality of power supplies

1.7.3 **Harmonics.** Unless specified otherwise, the total harmonic distortion (THD) of the voltage waveform at any switchboard or section-board is not to exceed 8 per cent of the fundamental for all frequencies up to 50 times the supply frequency and no voltage at a frequency above 25 times supply frequency is to exceed 1,5 per cent of the fundamental of the supply voltage. THD is the ratio of the rms value of the harmonic content to the rms value of the fundamental, expressed in per cent and may be calculated using the expression:

$$V_{\pm} THD = \frac{\sqrt{\sum_{h=2}^{\infty} V_h^2}}{V_1} \times 100$$

where

V_{\pm} = total harmonic voltage

V_h = rms amplitude of a harmonic voltage of order h

V_1 = rms amplitude of the fundamental voltage.

■ Section 10 Electric cables and busbar trunking systems (busways)

10.7 Correction factors for cable current rating

(Part only shown)

10.7.4 **Short time duty.** When the load is not continuous i.e. operates for periods of half an hour or one hour and the periods of no load are longer than three times the cable's time constant, T , in minutes, the cable's continuous rating may be increased by a duty factor, calculated in accordance with:

$$\text{Intermittent factor} = \sqrt{\frac{1,12}{1 - e^{-\frac{t_s}{T}}}} \sqrt{\frac{1 - e^{-\frac{t_p}{T}}}{1 - e^{-\frac{t_s}{T}}}}$$

■ Section 17 Crew and embarked personnel emergency safety systems

17.1.5 Switches are not to be installed in the final sub-circuits to emergency light fittings unless the light fittings are serving normally unmanned spaces, (~~i.e.~~ e.g. storage-rooms, cold rooms, etc.), or they are normally required to be extinguished for operational reasons, ~~i.e.~~ e.g. for night visibility from the navigating bridge. Where switches are fitted they are to be accessible only to ship's crew and embarked personnel with provision made to ensure that the emergency lighting is energised when such spaces are manned and/or during emergency conditions. Where 'darken ship' requirements are specified, switches may be installed in the circuits to emergency light fittings provided they are clearly identified.

Section numbering in brackets reflects any Section renumbering necessitated by any of the Notices that update the current version of the Rules for Naval Ships.

Volume 2, Part 10, Chapter 1

3.2.9(b)	<i>Reference to 3.2.5(g)(i) now reads 3.2.7(g)(i).</i>
3.5.7	<i>Reference to 3.5.1 now reads 3.5.2.</i>
8.3.1	<i>Reference to 1.8 now reads 1.9.</i>
8.3.2	<i>Reference to 1.8 now reads 1.9.</i>
8.3.3	<i>Reference to 1.8 now reads 1.9.</i>
Table 1.8.1	<i>Reference to 1.8 now reads 1.9.</i>
9.1.2	<i>Reference to 1.8 now reads 1.9.</i>
9.1.4	<i>Reference to 1.8 now reads 1.9.</i>
9.2.2	<i>Reference to 1.8 now reads 1.9.</i>
10.6.5	<i>Reference to 1.11.7 now reads 1.12.7.</i>
10.14.1	<i>Reference to 1.10.6 now reads 1.11.6.</i>
14.5.1	<i>Reference to 3.2.5(c) now reads 3.2.7(c).</i>
14.5.1	<i>Reference to 3.2.7(a) now reads 3.2.9(a).</i>
14.6.1	<i>Reference to 3.2.5(d)(ii) now reads 3.2.7(d)(ii).</i>

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